

WHAT IS CLAIMED IS:

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1. A method for routing a plurality of data packets in a network, comprising:
receiving a data packet of the plurality having a destination;
determining a route for the data packet based on the destination;
determining a lifetime for the data packet based on the route;
setting a time-to-live value for the data packet based on the lifetime; and
forwarding the data packet along the route.
 2. The method according to claim 1, further comprising:
detecting an event affecting the route; and
modifying the time-to-live value based on the event.
 3. The method according to claim 1, wherein determining the lifetime
comprises:
incorporating an error factor based on the route for the data packet.
 4. The method according to claim 1, wherein forwarding the data packet
comprises:
encapsulating the data packet in a wireless packet format; and
setting the time-to-live value in a field of the wireless packet format.

5. A method of routing a plurality of data packets in a network, comprising:
receiving a data packet of the plurality having a destination;
determining a route for the data packet based on the destination;
determining a first time-to-live value set for the data packet;
5 modifying the first time-to-live value to form a second time-to-live value.
forwarding the data packet along the route based on the second time-to-
live value.

6. The method according to claim 5, wherein forwarding the data packet
comprises:
forwarding the data packet toward the destination, when the second time-
to-live value is greater than 0.

7. The method according to claim 5, wherein forwarding the data packet
comprises:
discarding the data packet, when the second time-to-live value is 0.

8. A data packet processing node comprising:
an input to receive a data packet having a destination;
a route processor to determine at least one route for the data packet
based on the destination;

5 a lifetime processor to set a lifetime for the data packet based on the at
least one route; and
an output to forward the data packet along the route.

9. The network node according to claim 8, wherein the lifetime processor
further comprises:

an event detector to detect an event affecting the at least one route.

10. The network node according to claim 8, wherein the lifetime processor
further comprises an error factor processor to determine an error factor to associated
with the route.

11. The network node according to claim 8, wherein the output to forward the
data packet further comprises a wireless interface to encapsulate the data packet in a
wireless packet format.

12. The network node according to claim 11, wherein the wireless interface sets, in a field of the wireless packet format, the time-to-live value based on the lifetime for the data packet.

13. An apparatus comprising:
means for receiving a data packet having a destination;
means for determining a route for the data packet based on the destination;
5 means for determining a lifetime for the data packet based on the route;
means for setting a time-to-live value for the data packet based on the lifetime; and
means for forwarding the data packet along the route.

14. A computer readable medium capable of configuring a device to perform a method for managing data packets in a network, the method comprising:
receiving a data packet having a destination;
determining a route for the data packet based on the destination;
5 determining a lifetime for the data packet based on the route;
setting a time-to-live value for the data packet based on the lifetime; and
forwarding the data packet along the route.

15. A data packet with a time-to-live set based on lifetime for a determined route comprising:

a field identifying a destination; and

a time-to-live field set based on a determined likely route the data packet

5 will travel to reach the destination.

16. The data packet according to claim 15, wherein the time-to-live field further comprises an error factor associated with the likely route.

17. The data packet according to claim 15, wherein the data packet is encapsulated in a wireless packet format.

18. The data packet according to claim 15, wherein the time-to-live field is set based upon a time associated with the determined likely route the data packet will travel.

19. The data packet according to claim 15, wherein the time-to-live field is set based upon a hop count associated with the determined likely route the data packet will travel.

20. A data packet with an adjustable time-to-live traveling within a network comprising:

a field to identify a destination for the data packet; and

a time-to-live field, adjusted within the network based upon a condition of

5 a determined likely route the data packet will travel to reach the destination, to indicate a lifetime for the data packet.

21. The data packet according to claim 20, wherein the network is a wireless ad-hoc network.

22. A network for forwarding a data packet from a source to a destination based on a lifetime for the data packet along a route, said network comprising:

a first node including:

means for receiving, from said source, a data packet having a
5 destination;

means for determining a route for the data packet based on the
destination;

means for determining a lifetime for the data packet based on the
route;

10 means for setting a time-to-live value for the data packet based on
the lifetime;

means for forwarding the data packet to a second node along the
route; and

a second node including

15 means for receiving, from the first node, the data packet;

means for determining the time-to-live value set for the data packet;

means for modifying the time-to-live value to form a modified time-
to-live value;

20 means for forwarding the data packet based on the modified time-
to-live value.

23. The network according to claim 22, wherein:

the first node and the second node are ad-hoc routers.

24. The network according to claim 22, wherein the means for forwarding of the second node forwards the data packet towards the destination along the route, when the modified time-to-live value is greater than 0.

25. The network according to claim 22, wherein the means for forwarding of the second node discards the data packet, when the modified time-to-live value is 0.